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			Application Number	10/539,373
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STAT	EMENT BY	APPLICANT	Filing Date	June 16, 2005
			First Named Inventor	Yoshiyuki FUKUMOTO
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	U.S. PATENT DOCUMENTS								
Examiner Initials*	Cita	Document 1	Number	Publication Date					
	Cite No.1	Number	Kind Code ² (if known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document				
		US	•						
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			F	OREIGN PA	TENT DOCUMEN	ITS	
Examiner Cite No.1	Cite	Gite Foreign Patent Document			Publication Date	Name of Patentee or	
	No.1	Country Code ³	· Number ⁴	Kind Code ³ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation ⁶
\$#	Λ	JP	10-65232	Α	03-06-1998		
/		JP	2002-74627	A	-03-15-2002		
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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
SH		K. Matsuda et al.; "Reduced magnetoresistance in magnetic tunnel junctions caused by geometrical artifacts"; Applied Physics Letters; Vol. 77, No. 19; November 6, 2000; pages 3060-3062.	
~		J. S. Moodera et al.; "Geometrically enhanced magnetoresistance in ferromagnet-insulator-ferromagnet tunnel junctions"; Applied Physics Letters; Vol. 69, No. 5; July 29, 1996; pages 708-710.	
	_	S. Ohnuma et al.; "Soft Magnetic Films with High Electrical Resistivity"; Journal of the Magnetics Society of Japan; Vol. 19, No. 1; 1995; pages 19-25; with English Abstract.	

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Examiner Signature	A. Heinz	Date Considered	[[]]	06
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PTO/S8/08a (07-05) Approved for use through 07/31/2008. OMB 0651-0031 U.S. Petent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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				Application Number	10/539,373	
	RMATION			Filing Date	08-16-05	
STA	TEMENT B'	Y AF	PPLICANT	First Named Inventor	Yoshiyuki FUKUMOTO	
				Art Unit		
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Sheet	1	of	1	Attorney Docket Number	Q88645	

	·			U.S. PA	TENT DOCUMENTS	
Examiner Initial	Cite No. 1	Document Number Kind Code ² (if known)		Publication Date MM-DD-YY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear
<i>7</i> / *		US-5,986,	858 A	11-16-99	Sato et al.	
5		US-2002/0	0102828 A1	08-01-02	Scholsser	
3		US-6,544,	801 B1	04-08-03	Slaughter et al.	
₹ <u> </u>		US-6,611,	405 B1	08-26-03	Inomata et al.	
7		US-6,710,	987 B2	03-23-04	Sun et al.	
र		US-6,897,	532 B1	05-24-05	Schwarz et al.	
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FOREIGN PATENT DOCUMENTS									
Examiner C	Cite	Fore	ign Patent Document	Publication Date	Name of Patentee or Applicant of	Pages, columns, Lines, Where Relevant	Τ		
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

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Application Number	Not yet assigned				
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Filing Date	June 16, 2005				
First Named Inventor	Yoshiyuki FUKUMOTO				
Art Unit	Not yet assigned				
Examiner Name	Not yet assigned				
Attorney Docket Number	Q88645				

	U.S. PATENT DOCUMENTS								
		Document Nu	mber .						
Examiner Initials*	Cite No.1	Number	Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document				
171		US 2002/0044396	A1	04-18-2002	Amano et al.				
1		US 2004/0145850	A1	07-29-2004	Fukumoto et al.				
•		US							
		US		1					
		US							
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		_	F	OREIGN PA	TENT DOCUMEN	NTS	
Examiner Initials*	Cite	Cite Foreign Patent Document			Publication Date	Name of Patentce or	
	No.1	Country Code ³	Number ⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation*
AA		JР	2000-20922	Α	01-21-2000		
V		EP	1033764	A2	09-06-2000		
~		JР	62-132211	Α	06-15-1987		
		JP	3-268216	A	11-28-1991		
/		EP	1202357	A2	05-02-2002		
~		JP	2002-329903	Α	11-15-2002		
		JP	2003-273420	A	09-26-2003		
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Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issus number(s), publisher, city, and/or country where published.	Translation ⁶
ALL		S. Cardoso et al., Influence of Ta antidiffusion barriers on the thermal stability of tunnel junctions, Applied Physics Letters (Vol. 78, May 7, 2001, pp. 2911-2913)(the second conventional example).	
/		J.J. Sun et al., Low resistance and high terminal stability of spin-dependent tunnel junctions with synthetic antiferromagnetic CoFe/Ru/CoFe pinned layers, Applied Physics Letters (Vol. 76, April 24, 2000, pp. 2424-2426).	
/		S. Cardoso et al., Influence of Ta antidiffusion barriers on the thermal stability of tunnel junctions, Applied Physics Letters (Vol. 76, June 19, 2000, pp. 3792-3794).	
	_	T. Ochiai et al., Improved Thermal Stability of Ferromagnetic Tunnel Junctions With a CoFe/CoFeOx/CoFe Pinned Layer, IEEE Transactions on Magnetics, (Vol. 39, September, 2003, pp. 2797-2799).	(A)

			
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Examiner Signature		Date Considered	1/01/06
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